proACTIV board

User Guide

promethean
enrich, enlighten, inspire

PC and Mac™
US Edition
TP-1484-US
Issue 3

All rights reserved

All information contained in this document is subject to change without notice.

Any use of the contents of this User Manual other than for the purpose intended requires express written permission of Promethean Technologies Group Ltd.

All trademarks noted with the ™ mark are the properties of their respective companies.

NOTE: All utility and driver software provided to operate ACTIV products is the property of Promethean. Use of this software is granted for the purpose of installation, set up and operation of ACTIV products and the standard feature set outlined in this guide. Promethean does not encourage or authorize any other use.

Additional application software is provided from time to time as a service to our customers. This software is licensed to the end user by the supplier. Use, possession and upgrades are the responsibility of that supplier. Registered owners of Promethean product should contact those suppliers directly for support.

© Copyright Promethean Technologies Group Ltd 2005

Table of Contents

Introduction 1
- About this guide 1
- For More Information 1
  - User Group Forum 1
  - Online Help 1
  - Support and Information 2
  - Updates 2

Compliance 2

Health and Safety Precautions 3
- Hazardous Material 3
- Power Supply 3

Environmental Considerations 3

Mains Electrical Supply 3

Installation 4
- Safety Notices 4
- proACTIV board Installation Options 5
  - Wall Mounting 5
  - Portable Stand 6
- Software Installation 7
- Electrical Connections 7
- Extending the Interface Cable 7
  - Serial 7
  - USB 7

Operation 8
- Safety Notices 8
- Projector 9
  - Recommendations 9
  - Preparation 9
  - Framing the Screen Image 9
  - Additional LCD Projector Adjustment 9
- ACTIVpen 10
  - Changing the ACTIVpen tip 10

Calibrating the proACTIV board 11

Maintenance & Cleaning 12

Introduction

About this guide

This user guide will help you install, set up and operate your proACTIV board system. Should you require information about installing your software or making electrical connections, refer to the Quick Start Guide supplied with your product. Other documentation and text files relating to your system are included on your installation CD in PDF format. In order to view this documentation you must install the Adobe Acrobat reader, which is also available on the installation CD.

For More Information

User Group Forum

http://www.prometheanworld.com/common/html/vb_forum/index.php

The User Group forum allows you to post discussion topics and share information surrounding the use of the proACTIV board with other users.

You will be asked to register your details to become a member when you visit the forum. You are encouraged to join and visit the forum regularly for news about updates to the ACTIV range of products, software and resources.

Online Help

The software application includes complete documentation in an accessible online help system. This includes information on all of the tools and features.

Accessing Online Help

Do one of the following:

- Click the **Help...** button from the Did You Know window, which is displayed when the software opens.
- In ACTIVstudio2, access the menu and select **Help...>** then select one of the Help items. In ACTIVprimary2, click on **Teacher Tools Menu button > Menu... > Help...**.

The online help will open in a new window. The format is designed to allow easy navigation so you can view each topic using the contents list, or find information about a specific topic by using the index or search options.

Support and Information

Telephone: 678 762-1500 Monday - Friday 09.00 – 17.00

Email: support@us.prometheanworld.com

Web: http://www.prometheanworld.com/n-america/en/html/customer_care/contact.shtml

Updates

Visit the Promethean website frequently to check for updated drivers, software, user guides and flipchart resources

http://www.prometheanworld.com

Compliance

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this equipment not expressly approved by Promethean may void the user's authority to operate this equipment.

For non-intentional radio paths, this equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Health and Safety Precautions

Hazardous Material

Ensure you read the safety notices on page 4 prior to installing your system.

Danger of exposure to hazardous materials. Contact a specialist for advice if you suspect your building contains hazardous materials.

Power Supply

This proACTIV board is supplied with a universal voltage input Power Supply Unit (PSU) branded "ACTIVboard" type number FW7400/06. This is the only approved type of PSU for use with a proACTIV board. Do not connect any other PSU to the proACTIV board.

The PSU does not contain any user serviceable parts and must not be opened. If suspected to be faulty, contact an authorized Promethean service agent to obtain a replacement PSU of the same type.

Inspect the PSU for physical damage to the casing and wiring before use.

If damage is apparent, take care to avoid contact with any potentially live parts. Disconnect the PSU from the electrical mains supply at the wall socket and contact an authorized Promethean service agent for advice or replacement.

The PSU is supplied with a suitable mains input lead for your specific country. It may also be supplied with additional mains leads (in the case where the country has more than one type mains plug). Only use the lead which is compatible with your mains outlet socket. Do not attempt to modify the mains lead. If a compatibility issue exists, contact Promethean or one of its service agents before attempting to connect the unit to the mains supply.

Environmental Considerations

Operating temperature	32°F to 122°F (0ºC to 50ºC)
Humidity (non-condensing)	0% to 90%

Mains Electrical Supply

Mains electrical supply	100 to 240 Volts AC RMS
Frequency	50Hz to 60Hz
Current supply	300mA RMS

Installation

Safety Notices

The following precautions must be undertaken before proceeding with any installation, which involves either fixing to or contact with the fabric of a building.

Determine the presence of potentially hazardous materials, e.g. asbestos, before commencing work.

Prior to commencing work, consult the building plans if they are available. Alternatively, seek professional advice on the potential risk of contact with hazardous materials. If you suspect hazardous materials are present, the installation must only be undertaken by specialist contractors.

If hazardous materials are found or suspected after commencing work, stop the installation immediately and evacuate the room.

Notify the Health and Safety or Facilities Management officials and seek specialist advice.

Ensure you are equipped with suitable protective equipment before commencing work.

Wear a protective mask to prevent inhalation and ingestion if the installation requires drilling of materials or contact with dust (either in the air or on surfaces).

Wear suitable eye protection when drilling.

Wear protective gloves in cases where dust is generated and/or insulation materials are handled.

proACTIV board Installation Options

Note: To avoid interference with the proACTIV board, we recommend that the PSU is located at least 30cm away from the proACTIV board.

The wall mounting option allows maximum flexibility for the many types of walls found in building construction. If you feel that none of the suggested mounting instructions suit your situation, consult the building plans or a reliable contractor for further assistance with your installation.

Wall Mounting

Parts supplied:

- Wall Mount Accessory Kit
- Wall/Stand Mount Leaflet TP1443

Plugs and screws are not supplied for fixing the brackets as these can vary dramatically dependent upon the nature of the wall. You must use the appropriate fixing for your type of wall.

Wall Mounting Procedure

1. Determine a suitable position for your proACTIV board

   Ideally, this should be a flat and solid wall. Fixing to a wall other than a flat wall, may require the use of battens or our alternative fixing brackets.

Determine the presence and location of all electrical wiring and pipes before fixing the brackets.

Wires and pipes may be embedded within the wall. Use a proximity detector to check the location of these if necessary.

Ensure the brackets will not be fixed within 150mm of any electrical wiring or pipes.

2. Measure up

   Mark the wall with a horizontal line at 950mm from the floor, then mark the position of the bracket holes according to the dimensions given in the TP1443 Installation Leaflet.

3. Prepare wall

   For a conventional solid flat wall, drill the bracket holes with a suitable masonry drill. Other types of wall may require different drill types.

   Insert the appropriate plugs. Screw in the brackets as described in the TP1443 Installation Leaflet.

4. Fix into position

Two people are required to safely install, move and position the proACTIV board.

Before lifting the proACTIV board into position, ensure the required cables are connected to the electronics pod on the rear of the proACTIV board.

Lift the proACTIV board up parallel with the wall and tilt the board forward slightly, resting the bottom of the board on the bottom brackets. Take extreme care to avoid the proACTIV board falling off the brackets. Align the brackets on the rear of the proACTIV board with the wall brackets and then lift it so that the brackets engage. The proACTIV board should now slide down and the bottom should rest in the bottom brackets. Ensure that all brackets are fully engaged.

Portable Stand

A portable stand, which is height adjustable, can be purchased separately, contact Promethean for more information. To fix the proACTIV board, screw the wall mounting brackets to the stand at the preferred height position.

Maximum load on proACTIV board stands must not exceed 30KG. Read all instructions before using the stand.

Never attempt to adjust the height of the stand without first removing the proACTIV board from the stand.

Always ensure the two upper arm adjustment knobs are tight prior to using your proACTIV board.

Software Installation

You must install the software before connecting the proACTIV board to your computer. Instructions on how to install the software are included in the Quick Start Guide supplied with your product.

Your proACTIV board will be incorrectly configured with the standard USB Human Interface Device Driver for your version of Windows if:

- You attach the proACTIV board via the USB cable to your computer before installing the ACTIVdriver.
- You are using Windows XP, where the proACTIV board will initially be incorrectly configured.

Refer to the USB Driver Getting Started Guide, available on your product CD, for the instructions required to manually correct the installed USB driver.

Electrical Connections

Instructions on how to connect the proACTIV board to your computer are included in the Quick Start Guide supplied with your product.

Extending the Interface Cable

Serial

The proACTIV board is supplied with an 8m serial cable as standard. You may extend this distance up to a maximum cable length of 20m using the long cable set, which is available separately from Promethean.

USB

The proACTIV board is supplied with a 5m USB cable. This may be extended up to a maximum of 30m by the use of either multiple active repeater cables, or multiple USB hubs and passive cables. For example, you can use five 5m active repeater cables and a 5m passive cable, or five USB hubs and six 5m passive cables.

Operation

The proACTIV board provides a projection screen for your LCD projector to display your computer's video output while replacing your mouse or trackball with a humanized writing tool in the shape of a pen.

Safety Notices

Be aware of the following general precautions before operating any products:

Read all supplied instruction manuals carefully before operating your products.

Adult supervision is recommended at all times when children are operating the equipment.

Promethean are always pleased to advise customers about classroom layout and environment. We do however, always suggest that a space of 1m is left either side of the board to allow for free movement.

The system has been designed and set up by trained personnel. Do not attempt to alter it in any way; you may increase the risk of system malfunction.

If the system malfunctions, never attempt any repairs by yourself, it will invalidate your warranty.

Your LCD projector emits a beam of concentrated light. Do not stare at the beam for any length of time.

Face away from the projector whilst working at the proACTIV board as far as is reasonably practicable. Whilst facing your class, always stand outside the projected beam.

Before cleaning the air filters, ensure that the equipment is switched off and cooled down to an appropriate temperature.

It is recommended that this activity is carried out first thing in the morning.

Projector

Recommendations

VGA or better video capabilities when used with an LCD projector. The LCD can only be used to its maximum resolution and color depth when the video output of your computer (video board) matches the LCD manufacturer's recommendation for the specific model you are using. The proACTIV board has no upper limit to resolve your projected image or color depth other than the limits of the LCD projector in use.

Preparation

Set up your LCD projection equipment and connect to your computer according to the instructions supplied with those components.

Framing the Screen Image

Note: The active surface of the proACTIV board extends from edge to edge, so your ACTIVpen will work anywhere on the proACTIV board surface

Switch your projector on and project the screen image onto the proACTIV board. Position the image and adjust the size so the image falls within the edge strip, which is fitted around the edge of the proACTIV board.

Additional LCD Projector Adjustment

Most LCD projectors have a framing control that may require adjusting manually. Additionally, many projectors have an auto image feature, which will automatically adjust the image size and match the display to your computer graphics card. This is to ensure the screen image is not clipped at the top, bottom or edges. Consult your LCD Projector manual if you are not familiar with this control feature.

Note: Perform the auto image or framing control procedure before calibrating the proACTIV board.

ACTIVpen

Your ACTIVpen controls your computer, your application software and your operating system as you touch, click and draw directly on the proACTIV board during your class, presentation or meeting.

Two pens are supplied so in the event of accident or loss you will always have a spare.

The ACTIVpens 'tune' themselves to the board and are not designed to operate alternately. When using a new ACTIVpen for the first time it is advisable to approach the proACTIV board surface slowly to allow the board to 'tune' into the new pen.

You are advised to use one pen at a time, keeping the spare in a safe place.

The pen tip is the equivalent of the LEFT mouse button. The side button is the equivalent of the RIGHT mouse button.

The pens have a removable tip, which can be replaced should it become worn with use. Contact Promethean Customer Services for a replacement.

Changing the ACTIVpen tip

1. Pull out the existing tip with your fingers or tweezers.
2. Insert the replacement tip and push into place fully.

Note: There are no user replaceable parts inside the ACTIVpens. Do not attempt to disassemble them.

Calibrating the proACTIV board

The projected image must be aligned with the computer referenced screen image (orthographic correction) each time the LCD projector is moved or set up. This is to align the pen and computer pointer image.

Calibrating the proACTIV board is a simple and quick procedure that can be performed easily at any time.

If your installation of the proACTIV board and the projection equipment is permanent, you will only have to re-calibrate after any adjustment affecting projected image size is made, or a different computer is used.

In a non-permanent set up, should you or anyone move the projector or the table (or the proACTIV board, if mounted on a stand) during or prior to the end of your proACTIV board projection session you will have to re-calibrate.

The projected image should be within the edge strip on the proACTIV board. To launch the calibration program hold the pen tip for two seconds over the center of the illuminated spot, located in the top left hand corner of the board. Or:

- For a Windows Computer

  Launch the calibration utility by right clicking on the driver icon in the system tray, which is located in the bottom right hand corner of the Windows screen.

- For a Mac Computer

  Launch the calibration utility by double clicking on the proACTIV board icon in the System Preferences screen, then click on the proACTIV tab and select Calibrate.

The calibration program will prompt you to click on the active area with the pen. The calibration program will then project a calibration cross. Click the pen accurately on the center of the cross and another cross will appear. When you have clicked on five calibration crosses, the calibration utility will automatically close. Your proACTIV board system is now calibrated.

Maintenance & Cleaning

Do not use abrasive powders, soap, detergents or petroleum based cleaners or solvents on the proACTIV board surface.

Scratches cannot be repaired or removed and will make ink and stain removal in that area difficult. Do not use metal brushes, scrapers or abrasive cleaning cloths.

The surface of the proACTIV board is made to very high standards of durability. In normal use you can expect satisfactory results every time with proper maintenance.

Due to the high quality of projection surface it is not recommended that dry wipe markers are used on a regular basis. If, however, the surface needs cleaning after the use of such markers, we recommend the following methods:

- For normal dry wipe markers use Sanford Expo Towelettes 81850. Do not use a board rubber.
- For permanent markers use Sanford spray cleaner 81803.

You should be able to obtain these products from an office supplies company.

A polish with standard household spray polish will restore the smooth writing surface after cleaning.

promethean
enrich, enlighten, inspire

Promethean Technologies Group Limited
8601 Dunwoody Place, Suite 108, Atlanta,
GA 30350

Tel: (888) 652-2848
Fax: (678) 762-7700
www.prometheanworld.com